



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of: Meruelo et al.

Serial No.: Not Yet Known

Group Art Unit:

Filed: Herewith

Examiner:

For: VIRAL VECTORS HAVING

CHIMERIC ENVELOPE

PROTEINS CONTAINING THE IGG DOMAIN OF PROTEIN A

Attorney Docket No.: 8105-009

TRANSMITTAL OF SEQUENCE LISTING

Assistant Commissioner for Patents Washington, D.C. 20231

sir:

In connection with the application filed herewith,

Applicants submit herewith: a) Sequence Listings in paper and

computer readable form pursuant to 37 C.F.R. §1.821(c) and

(e), respectively.

I hereby state that the content of the computer readable copy of the Sequence Listing and the Sequence in the accompanying application are the same.

Respectfully submitted,

Date <u>March 28, 1997</u>

Brian M. Poissant

28,462

Brian M. Poissant

(Reg. No.)

PENNIE & EDMONDS LLP

1155 Avenue of the Americas New York, New York 10036-2711 (212) 790-9090

Enclosures



Express Mail No.: EM 325 961 170

PENNIE & EDMONDS LLP

COUNSELLORS AT LAW 1155 Avenue of the Americas New York, N.Y. 10036-2711 (212) 790-9090

ATTORNEY DOCKET NO. 8105-009

Date March 28, 1997

Assistant Commissioner for Patents Box PATENT APPLICATION Washington, D.C. 20231

Sir:

The following utility patent application is enclosed for filing:

Applicant(s):

Enclosure

Daniel Meruelo

Kouichi Ohno

Executed on: March 28, 1997

March 28, 1997

Title of Invention:

VIRAL VECTORS HAVING CHIMERIC ENVELOPE PROTEINS CONTAINING THE IgG-

BINDING DOMAIN OF PROTEIN A

Pages of Specification 35 + Abstract

Sheets of Drawings 6

PATENT APPLICATION FEE VALUE

				111111		
ТҮРЕ	NO. FILED	LESS	EXTRA	EXTRA RATE		FEE
Total Claims	47	-20	27	\$22.00 each		594.00
Independent	5	-3	2	\$80.00 each		160.00
			Minimum Fee			770.00
			Multiple Dependence If Applicable (\$260			
Total 50% Reduction for Independent Inventor, Nonprofit Organization or Small Business Concern (a verified statement as to the applicant's status is attached)						1,524.00
					_	
				Total Filing Fee	\$	1,524.00

Priority of application no. filed on in is claimed under 35 U.S.C. § 119.

Please charge the required fee to Pennie & Edmonds LLP Deposit Account No. 16-1150. A copy of this sheet is enclosed.

Ho Reg. No., 36,581

Brian M. Poissant

PENNIE & EDMONDS LLP

This form is not for use with re-issue, design or plant patent applications.



VIRAL VECTORS HAVING CHIMERIC ENVELOPE PROTEINS CONTAINING THE IGG-BINDING DOMAIN OF PROTEIN A

AD EMPLOY	TABLE OF CONTENTS	Pag	e
5 1.	. FIELD OF THE INVENTION	- 1	_
2.	. BACKGROUND OF THE INVENTION	- 1	_
	2.1. Use of Amphotropic and Ecotropic Retrovirus		
	Vectors	- 2	_
10	2.2. Known Viral Vector Complexes to Transduce		
	Target Cells	- 4	_
	2.3. Use of Sindbis Virus Vectors	- 5	_
3.	. SUMMARY OF THE INVENTION	- 8	_
4.	. BRIEF DESCRIPTION OF THE FIGURES	- 8	_
15 5.	. DETAILED DESCRIPTION OF THE INVENTION	- 11	_
6.	EXAMPLES	- 15	_
	6.1. Example 1:	- 15	_
	6.1.1. Plasmids and Cell Line	- 16	_
	6.1.2. Construction of chimeric env gene	- 16	_
20	6.1.3. Cell transfection and virus production.	- 17	
	6.1.4. Immunoblot assay	- 17	_
	6.1.6. Results	- 18	_
	6.1.7. Discussion	- 20	_
	6.2. Example 2:	- 21	-
25	6.2.2. Construction of protein A-envelope		
	Sindbis virus helper plasmid	- 21	_
	6.2.3. Expression and incorporation of chimeri	.c	
	envelopes into virions	- 22	_
	6.2.4. Infection with viruses carrying mutant		
30	envelopes	- 23	_
	6.2.5. Discussion	- 25	_
	6.2.6. Experimental protocol	- 28	_
7.	DEPOSIT OF MICROORGANISMS	- 31	_
8.	. SEQUENCE LISTING	- 33	_
35			